

REMARKS/ARGUMENTS

The Office Action mailed November 20, 2002, has been carefully reviewed in light of the Examiner's helpful comments and suggestions.

As a preliminary matter, Applicant asserts that Figures 13 and 14, and their descriptions in the specification, are not new matter because they were included in the Danish Application Number PA 2001 01661, filed November 6, 2000, upon which Convention priority is claimed, and a certified copy of which was filed on November 7, 2001. Applicant hereby submits a courtesy copies of pages 3 and 6 of the priority Danish application, which clearly shows the description of Figures 13 and 14.

As a result of the Office Action, a number of objections were raised in connection with the drawings. Submitted herewith for approval by the Examiner is one sheet of drawing with proposed changes shown in red. More specifically, Figure 8 has been amended to show the guide rails 12' upon which the guide 12 can move in the horizontal direction toward and away from the workpiece. This limitation was described in the specification but not shown in the drawings. Therefore, it is believed that no new matter has been added.

Furthermore, the specification has been amended to delete lines 19-27 on page 1 and lines 1-4 on page 2, as requested by

the Examiner.

Moreover, the specification has been amended to include the description of screws 19. As to the item number 35, namely the plate member 35, Applicant respectfully submits that this limitation was described on page 5, line 7, of the original specification.

Furthermore, a number of objections were raised in connection with the specification, and the Examiner had requested new application papers be submitted. All of those objections have been addressed by the enclosed substitute specification, submitted both in a clean version and a marked-up version showing changes made. Descriptions of Figures 13 and 14 in the Brief Description of the Drawings section of the specification has been added. No new matter has been added.

In response to Examiner's request for clarification on how a cross member notch (4) is formed in a single punch, Applicant respectfully submits that the "one punching or shearing operation" statement on page 3, line 19, of the original specification, is an error which resulted from the translation of the Danish language priority application. This error is also clear from, for example, original claim 1, and Figures 13 and 14 of that application. Therefore, the statement has been amended to read "a punching or shearing operation."

In response to the Examiner's request for clarification on how the second set of adjustable guide members 23 function, Applicant points that on page 4, 4<sup>th</sup> paragraph of the original specification, and as shown in Figures 6 and 7, the stops 23 can have a working position in which the end of a workpiece can rest against the stops in a passive position.

As a result of the Office Action, claim 1 is rejected under '35 U.S.C. 112, first and second paragraphs. Also, claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Korb in view of Speer. By the above amendments, those Section 112, first and second paragraphs, have been addressed and, upon careful review of these references, it is not believed that they show or suggest Applicant's invention as now claimed. Reconsideration and allowance of the claim 1 is therefore respectfully requested in view of the following remarks.

Amended claim 1 now requires to preliminarily shear or punch the side member (1) at a first depth (d) from a side surface (1') of the side member (1), then to preliminarily shear or punch the cross member (2) at the same first depth (d) but from the side surface (2') of the cross member (2), and then to secondarily shear the side member (1) at a second depth (D) from the side surface (1') of the side member (1), and the cross member (2) at the second depth (D) from the side

surface (2') of the side member (2). The first depth (d) is less than the second (D). The preliminary shears create a profile identical to the final bar notch and the cross member notch.

Neither Korb nor Speer, taken individually or in combination, teaches or suggests the two step shearing process for creating a bar notch and a cross member notch that can fit together perfectly. Therefore, it is respectfully submitted that claim 1 is patentable over the prior art.

Each issue raised in the Office Action mailed November 20, 2002, has been addressed and it is believed that claim 1 is now in condition for allowance. Wherefore, Applicant respectfully requests a timely Notice of Allowance be issued in this case.

Respectfully submitted,  
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PATENT TRADEMARK OFFICE

VERSION WITH MARKINGS TO SHOW CHANGES MADE IN THE CLAIMS:

IN THE CLAIMS:

1. (Twice Amended) A method of producing a bar notch (3) in a side of a side member (1) and a cross member notch (4) on an end of a cross member (2), the method comprising the steps of:

preliminarily shearing or punching said side member (1) at a first depth (d) from a side surface (1') of said side member (1) to produce said bar notch (3), wherein said bar notch (3) includes a plane bottom (5), which is parallel with [a] said side surface (1') in the side member and two equally long, oblique sides (6), which have oppositely direct equal inclinations in relation to the bottom (5),

preliminarily shearing or punching said cross member (2) at said first depth (d) from a side surface (2') of said cross member (2) to produce said cross member notch (4), wherein the cross member notch has a plane end (7) in a cross member (2) and two inclined sides (8), and

secondarily shearing said side member (1) at a second depth (D) from said side surface (1') of said side member (1) and said cross member (2) at said second depth (D) from said side surface (2') of said side member (2), wherein said first depth (d) is less than said second (D), whereby[,wherein] said

side member [is] can be joined with said cross member by the  
bar notch (3) fitting into said cross member notch (4).

fig. 10 viser i perspektiv to sideknive og en nakkekniv til en maskine til gennemførelse af fremgangsmåden ifølge opfindelsen,

fig. 11 viser set i perspektiv en nakkekniv til en maskine til gennemførelse af fremgangsmåden ifølge opfindelsen,

fig. 12 viser nakkekniven set fra en anden vinkel.

fig. 13 viser skematisk i større målestok, set ovenfra, en sprosseudskæring og en del af et knivhoved til fremstilling af sprosseudskæringen, og

fig. 14 viser skematisk i større målestok, set ovenfra, en postudskæring og en del af et knivhoved til fremstilling af postudskæringen.

Som vist på fig. 1 består en ramme, eksempelvis til døre eller låger, af to sidestykker 1 og af et antal tværgående poste 2, der kan være fremstillet af materialer som træ, plast og MDF, der står for Medium Density Fiberboard. Sidestykkerne 1 og postene 2 samles ved sprossesamlinger, der består af en sprosseudskæring 3 i siden af et sidestykke 1 og en postudskæring 4 i enden af en post 2. En sprosseudskæring kan have en plan bund 5, der er parallel med en sideflade 1' i sidestykket 1 og to skrå sider 6, der er lige lange og har to lige store, modsat rettede hældninger  $\alpha$  i forhold til bunden 5. En postudskæring 4 består af et plant endestykke 7, der er vinkelret på en sideflade 2' i posten 2, og af to lige lange, skrå sider 8, der har ens, modsat rettede hældninger  $\alpha$  i forhold til bunden 7. Bunden 7 og siderne 8 har en sådan længde, at postudskæringen passer ind i sprosseudskæringen.

Ifølge opfindelsen fremstilles en sprosseudskæring 3 og en postudskæring 4 ved en stanse- eller klippeoperation.

Som vist på tegningen, fig. 5-10, omfatter en maskine til fremstilling af sprosse- og postudskæringer ved klipning et, set ovenfra, trekantformet knivhoved 9 for to sideknive 10 og en nakkekniv 11. Knivhovedet 9 kan bevæges i lodret retning i et styr 12. Denne bevægelse kan eksempelvis ske ved hjælp af en ikke vist fodpedal,

Som vist på fig. 13 fremstilles der ved forklippet, når den plane forside 21 af styreorganerne 17 er i en lille afstand fra emnet 1, der skal bearbejdes, en foreløbig sprosseudskæring, der er ligedannet med den færdige sprosseudskæring, der fremstilles under slutklippet, med skrå sider, der er parallelle med siderne 6, og en bund, der er parallel med bunden 5 i den færdige udskæring, men hvor dybden  $d$  er mindre end dybden  $D$  af den færdige sprosseudskæring, og hvor længden af de skrå sider og bunden derfor er mindre end længden af henholdsvis de skrå sider 6 og bunden 5. Ved dette forklip undgås det, at materialet i emnet 1 langs siderne 5 og 6 flosser under slutklippet. Der fremkommer således under slutklippet en sprosseudskæring med skarpe skrå sider 6 og bund 5, der ikke kræver nogen efterbearbejdning.

Tilsvarende fremstilles der ved forklip af en postudskæring en foreløbig udskæring, der er ligedannet med den færdige postudskæring, der fremstilles under slutklippet. Den foreløbige udskæring har mindre dybde  $d$  end dybden  $D$  af den færdige udskæring, og en skrå side 8, der er parallel med siden 8, men er kortere.

Det er ikke alle materialer, der har samme tendens til at flosse. Dersom emnerne 1 og 2 er fremstillet af et materiale, der har en lille eller ingen tendens til at flosse, kan forklippet udelades.